

Claims

- 1) Attenuated live parasite of the phylum Apicomplexa or the family of Trypanosomatidae, characterised in that said parasite comprises a ribosomal protein gene under the control of an inducible promoter.
- 2) Attenuated live parasite according to claim 1, characterised in that said parasite belongs to the Coccidia, the Piroplasmida or the Haemosporida.
- 3) Attenuated live parasite according to claim 2, characterised in that said parasite belongs to the family of the Eimeridiidae, Cryptosporidiidae or Sarcocystidae.
- 4) Attenuated live parasite according to claim 3, characterised in that said parasite belongs to the genus *Eimeria*, *Cryptosporidium*, *Toxoplasma*, *Sarcocystis* or *Neospora*.
- 5) Attenuated live parasite according to claim 2, characterised in that said parasite belongs to the family of the Babesiidae or the Theileriidae.
- 6) Attenuated live parasite according to claim 5, characterised in that said parasite belongs to the genus *Babesia* or *Theileria*.
- 7) Attenuated live parasite according to claim 2, characterised in that said parasite belongs to the genus *Plasmodium*.
- 8) Attenuated live parasite according to claim 1, characterised in that said parasite belongs to the genus *Trypanosoma* or the genus *Leishmania*.
- 9) Attenuated live parasite according to claims 1-8, characterised in that said inducible promoter is based upon an operator site and a repressor protein capable of reversibly binding said operator site.
- 10) Attenuated live parasite according to claims 1-9, characterised in that said inducible promoter is inducible by antibiotics.

- 11) Attenuated live parasite according to claim 10, characterised in that said inducible promoter is inducible by tetracycline or anhydrotetracyclin, or a derivative thereof.
- 12) Attenuated live parasite according to claim 11, characterised in that a tetR-system is used as the inducible promoter.
- 13) Attenuated live parasite according to claims 1-12, characterised in that said ribosomal protein gene is the gene encoding L9, S3, plastid-S9 or S13, preferably L9, S3, plastid-S9 or S13 of *Toxoplasma gondii*.
- 14) Attenuated live parasite according to claims 1-13 for use in a vaccine.
- 15) Vaccine for combating parasitic infection characterised in that said vaccine comprises a live attenuated parasite according to claims 1-13 and a pharmaceutically acceptable carrier.
- 16) Use of an attenuated live parasite according to claims 1-13 for the manufacture of a vaccine for combating infection caused by a parasite of the phylum Apicomplexa or the family of Trypanosomatidae.
- 17) Method for the production of a vaccine according to claim 15, said method comprising the mixing of a live attenuated parasite according to claims 1-13 and a pharmaceutically acceptable carrier.
- 18) DNA-fragment encoding a tet-repressor fusion protein comprising the tet-repressor protein and a heterologous protein or a part thereof, said heterologous protein or a part thereof being fused to the N-terminal side of the tet-repressor protein, the monomeric form of said fusion protein having a molecular weight of less than 60 kD and being free of GPI-anchors, secretion/excretion signals and trans-membrane regions.
- 19) Attenuated live parasite according to claims 1-13, characterised in that said parasite comprises the tet-operator site and a DNA fragment encoding a tet-repressor fusion protein according to claim 18.

- 20) Attenuated live parasite according to claim 19, characterised in that said parasite comprises two or more tet-operator sites.